

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended): An image coding-decoding method comprising the steps of:
performing a multiresolution transformation process on an image signal to obtain multiresolution transformed signals;
performing a coefficient transformation process, which corresponds to a desired image processing, on said multiresolution transformed signals to obtain processed transformed signals which carry a processed image subjected to said desired image processing;
performing a coding process on said processed transformed signals to obtain processed coded data which carries said processed image; and
decoding said processed coded data and further performing an inverse multiresolution transformation process, to obtain a processed image signal which carries said processed image[[.]];

wherein said coefficient transformation process is a process of performing transform on coefficients to produce an image similar to an image which can be obtained by performing at least one of gray-scale transformation processing, noise suppression processing, frequency enhancement processing, and dynamic range compression processing.

2. (currently amended): An image coding-decoding method comprising the steps of:
performing a multiresolution transformation process on an image signal to obtain multiresolution transformed signals;

performing a coding process on said multiresolution transformed signals to obtain coded data;

decoding said coded data to obtain decoded transformed signals;

performing a coefficient transformation process, which corresponds to a desired image processing, on said decoded transformed signals to obtain processed transformed signals which carry a processed image subjected to said desired image processing; and

performing an inverse multiresolution transformation process on said processed transformed signals to obtain a processed image signal which carries said processed image[.];

wherein said coefficient transformation process is a process of performing transform on coefficients to produce an image similar to an image which can be obtained by performing at least one of gray-scale transformation processing, noise suppression processing, frequency enhancement processing, and dynamic range compression processing.

3. (currently amended): An image coding-decoding system comprising:

multiresolution transformation means for performing a multiresolution transformation process on an image signal to obtain multiresolution transformed signals;

coefficient transformation means for performing a coefficient transformation process, which corresponds to a desired image processing, on said multiresolution transformed signals to obtain processed transformed signals which carry a processed image subjected to said desired image processing;

coding means for performing a coding process on said processed transformed signals to obtain processed coded data which carries said processed image;

decoding means for decoding said processed coded data; [[and]]

inverse multiresolution transformation means for performing an inverse multiresolution transformation process on said processed transformed signals to obtain processed image signals which carry said processed image[[.]]; and

wherein said coefficient transformation process is a process of performing transform on coefficients to produce an image similar to an image which can be obtained by performing at least one of gray-scale transformation processing, noise suppression processing, frequency enhancement processing, and dynamic range compression processing.

4. (currently amended): An image coding-decoding system comprising:

multiresolution transformation means for performing a multiresolution transformation process on an image signal to obtain multiresolution transformed signals;

coding means for performing a coding process on said multiresolution transformed signals to obtain coded data;

decoding means for decoding said coded data to obtain decoded transformed signals;

coefficient transformation means for performing a coefficient transformation process, which corresponds to a desired image processing, on said decoded transformed signals to obtain processed transformed signals which carry a processed image subjected to said desired image processing; [[and]]

inverse multiresolution transformation means for performing an inverse multiresolution transformation process on said processed transformed signals to obtain processed image signals which carry said processed image[[.]]; and

wherein said coefficient transformation process is a process of performing transform on coefficients to produce an image similar to an image which can be obtained by performing at

least one of gray-scale transformation processing, noise suppression processing, frequency enhancement processing, and dynamic range compression processing.

5. (currently amended): An image coder comprising:

multiresolution transformation means for performing a multiresolution transformation process on an image signal to obtain multiresolution transformed signals;

coefficient transformation means for performing a coefficient transformation process, which corresponds to a desired image processing, on said multiresolution transformed signals to obtain processed transformed signals which carry a processed image subjected to said desired image processing; and

coding means for performing a coding process on said processed transformed signals to obtain processed coded data which carries said processed image[.];

wherein said coefficient transformation process is a process of performing transform on coefficients to produce an image similar to an image which can be obtained by performing at least one of gray-scale transformation processing, noise suppression processing, frequency enhancement processing, and dynamic range compression processing.

6. (currently amended): An image decoder comprising:

decoding means for decoding coded data to obtain decoded transformed signals;

coefficient transformation means for performing a coefficient transformation process, which corresponds to a desired image processing, on said decoded transformed signals to obtain processed transformed signals which carry a processed image subjected to said desired image processing; and

inverse multiresolution transformation means for performing an inverse multiresolution transformation process on said processed transformed signals to obtain a processed image signal which carries said processed image[.];

wherein said coefficient transformation process is a process of performing transform on coefficients to produce an image similar to an image which can be obtained by performing at least one of gray-scale transformation processing, noise suppression processing, frequency enhancement processing, and dynamic range compression processing.

7. (currently amended): A computer readable storage medium recording a program for making a computer execute an image coding-decoding method, the program having:

a procedure of performing a multiresolution transformation process on an image signal to obtain multiresolution transformed signals;

a procedure of performing a coefficient transformation process, which corresponds to a desired image processing, on said multiresolution transformed signals to obtain processed transformed signals which carry a processed image subjected to said desired image processing;

a procedure of performing a coding process on said processed transformed signals to obtain processed coded data which carries said processed image; and

a procedure of decoding said processed coded data and further performing an inverse multiresolution transformation process, to obtain a processed image signal which carries said processed image[.];

wherein said coefficient transformation process is a process of performing transform on coefficients to produce an image similar to an image which can be obtained by performing at

least one of gray-scale transformation processing, noise suppression processing, frequency enhancement processing, and dynamic range compression processing.

8. (currently amended): A computer readable storage medium recording a program for making a computer execute an image coding-decoding method, the program having:

a procedure of performing a multiresolution transformation process on an image signal to obtain multiresolution transformed signals;

a procedure of performing a coding process on said multiresolution transformed signals to obtain coded data;

a procedure of decoding said coded data to obtain decoded transformed signals;

a procedure of performing a coefficient transformation process, which corresponds to a desired image processing, on said decoded transformed signals to obtain processed transformed signals which carry a processed image subjected to said desired image processing; and

a procedure of performing an inverse multiresolution transformation process on said processed transformed signals to obtain a processed image signal which carries said processed image[.];

wherein said coefficient transformation process is a process of performing transform on coefficients to produce an image similar to an image which can be obtained by performing at least one of gray-scale transformation processing, noise suppression processing, frequency enhancement processing, and dynamic range compression processing.

9. (previously presented): The image coding-decoding method of claim 1, wherein said processed coded data is selectively inputted from either a coding means or a storage device.

10. (previously presented): The image coding-decoding system of claim 3, further comprising a switch for selectively inputting said processed coded data from either a coding means or a storage device.

11. (previously presented): The image coding-decoding system of claim 10, wherein the storage device comprises a file server.

12. (previously presented): The computer readable storage medium of claim 7, wherein said program further has a procedure for selectively inputting said processed coded data from either a coding means or a storage device.

13. (previously presented): The method of claim 1, wherein said coefficient transform comprises at least one of coefficient suppression; a non-linear transform; and gamma transform according to the desired image processing.

14. (previously presented): The method of claim 1, wherein the multiresolution transformed signals comprise a set of multiresolution coefficients and said coefficient transformation process changes said multiresolution coefficients.

15. (previously presented): The method of claim 14, wherein said coefficient transform comprises at least one of coefficient suppression; a non-linear transform; and gamma transform according to the desired image processing.

16. (previously presented): The method of claim 13, wherein the coefficient suppression is applied to high frequency coefficients.

17. (previously presented): The method of claim 13, wherein the non-linear transform comprises a gradient adjustment on high frequency coefficients.

18. (previous presented): The method of claim 13, wherein the gamma transform is applied to low frequency coefficients.

19. (currently amended): A computer readable storage medium recording a program for making a computer execute an image coding-decoding method, the program having:

a procedure of performing a multiresolution transformation process on an image signal to obtain multiresolution transformed signals;

a procedure of performing a coefficient transformation process, which corresponds to a desired image processing, on said multiresolution transformed signals to obtain processed transformed signals which carry a processed image subjected to said desired image processing; and

a procedure of performing a coding process on said processed transformed signals to obtain processed coded data which carries said processed image[[]];

wherein said coefficient transformation process is a process of performing transform on coefficients to produce an image similar to an image which can be obtained by performing at least one of gray-scale transformation processing, noise suppression processing, frequency enhancement processing, and dynamic range compression processing.

20. (currently amended): A computer readable storage medium recording a program for making a computer execute an image coding-decoding method, the program having:

a procedure of decoding coded data to obtain decoded transformed signals;

a procedure of performing a coefficient transformation process, which corresponds to a desired image processing, on said decoded transformed signals to obtain processed transformed signals which carry a processed image subjected to said desired image processing; and

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a procedure of performing an inverse multiresolution transformation process on said processed transformed signals to obtain a processed image signal which carries said processed image[.];

wherein said coefficient transformation process is a process of performing transform on coefficients to produce an image similar to an image which can be obtained by performing at least one of gray-scale transformation processing, noise suppression processing, frequency enhancement processing, and dynamic range compression processing.